

## WATER MANAGEMENT MONTHLY REPORT

## **Information Exchange Bulletin**

**Vol. No.** 01 - 11

**Date: 03 December 2001** 

Prepared by: U.S. Army Engineer Division, Great Lakes and Ohio River, PO Box 1159, Cincinnati, OH 45201-1159

## RESERVOIR OPERATION AND SYSTEM STATUS FOR NOVEMBER 2001

**HIGHLIGHTS** – Cairo stage began the month at 23.3 feet and ended at 25.2 feet and was rising rapidly after falling to 10.5 feet on the 25<sup>th</sup> of November. Normal stage for November is 21 feet.

**WEATHER** –The weather during November was quite varied. The first three weeks were very dry with well above normal temperatures. However, the final week turned very wet with near normal temperatures. There was essentially no significant rainfall during the month before November 25<sup>th</sup> and Ohio River flows were around 25 percent of normal. Upper air flows then shifted to the south and southwest bringing storm systems tracking up through the western half of the basin. Rainfalls in excess of 10 inches were centered over the Lake Kentucky area of western Tennessee. Rainfall was more than double the normal in these areas while eastern Tennessee, Virginia and West Virginia received less than half their expected normal.

## **TEMPERATURE AND PRECIPITATION – NOVEMBER 2001**

	TEMPERATURE		PRECIPITATION	
STATION	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	48.2	+5.9	3.47	+0.62
Charleston, WV	50.3	+3.5	1.43	-2.16
Columbus, OH	49.6	+6.7	3.69	+0.47
Cincinnati, OH	50.0	+5.7	3.31	-0.15
Louisville, KY	53.5	+5.9	5.16	+1.46
Indianapolis, IN	49.5	+6.5	2.69	-0.54

Evansville, IN	50.8	+4.6	5.42	+1.69
Nashville, TN	54.3	+4.3	5.09	+0.97

**STREAMFLOW** -- Ohio River monthly average flows for November ranged from a low of 42 percent of normal at Pittsburgh, PA to a high of 105 percent of normal at Paducah, KY. Daily flows ranged from a low of 20 percent of normal at Huntington, WV to a high of 495 percent of normal at Paducah, KY.

The following table presents the flow data summary for November at the Ohio River Index Stations:

FLOW DATA – NOVEMBER 2001

STATION	AVERAGE MONTHLY FLOW	PERCENT LONG-TERM NORMAL		
	CUBIC FEET/SECOND	MONTHLY	DAILY	
			HIGH	LOW
Pittsburgh, PA	9,400	42	95	27
Huntington, WV	22,000	49	119	20
Cincinnati, OH	31,100	58	196	24
Louisville, KY	38,300	65	342	26
Evansville, IN	45,000	67	363	22
Paducah, KY	145,500	105	495	40

**RESERVOIRS** -- November started with 3.2% utilization of the total system flood control storage and ended the month at 4.7%. System-wide augmentation storage increased from 85.4% at the beginning of the month to 87.1% by the end of the month. Significant flood storage utilization in excess of 25% occurred at Salamonie and Cagles Mills and in excess of 50% at C.M.Harden project during the month as a result of storage in October. All three projects are located in the Wabash River basin of Indiana.

The following table depicts storage change by tributary reservoir subsystem for November:

CHANGE IN STORAGE	(ACRE-FEET)
-------------------	-------------

TRIBUTARY-RESERVOIR SUBSYSTEM	
Allegheny-Monongahela-Beaver	-16,400
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	-71,800
Twelvepole-Big Sandy-Little Sandy-Scioto	-53,400
Little Miami-Licking-Mill Creek-Great Miami	-13,700
Kentucky-Salt-Green-Wabash	-360,000
Cumberland	+42,300
TOTAL	-473,000

JAMES L. SEALS, P.E. Chief, Technical Engineering & Construction Div.